TRI-SERVICE REPORTABLE EVENTS

GUIDELINES & CASE DEFINITIONS

Version 1.0

Prepared by:
Army Medical Surveillance Activity (AMSA)

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1.0 OVERVIEW

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As part of the ongoing effort to consolidate DoD medical surveillance data, the following references are included in this *Tri-Service Reportable Events* document:

- Reportable event selection criteria (Section 2.0).
- A Tri-Service list of reportable events (Section 3.0).
- A compendium of case definitions (Section 4.0).
- Criteria for standardized data elements (Section 5.0).
- A list of synonymous terms for reportable diseases (Section 6.0).

The principal goal of this document is to achieve data consistency and standardization in order to facilitate analysis and comparison of data collected by each Service.

In order to address Service-specific needs, each Service will continue to be responsible for implementing its own reporting system, data collection, and quality assurance. The collected data will be integrated into the Defense Medical Surveillance System (DMSS) database, where it will be available to all three Services for further reporting and analysis.

Consult the following individual Service points of contact with Service-specific questions about the implementation of these guidelines:

Air Force:	Reportable Disease Project Officer USAF Epidemiology Services Branch DSN 240-3471
Army:	Reportable Disease Project Officer Army Medical Surveillance Activity DSN 662-0471
Navy:	Reportable Disease Project Officer Navy Environmental Health Center DSN 864-5603

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2.0 SELECTION CRITERIA FOR REPORTABLE MEDICAL EVENTS

The Tri-Service consensus list of reportable medical events (Section 3.0) uses predetermined selection criteria. These criteria were derived from stated objectives of each of the Services for medical event reporting.

Representatives of each Service's medical department applied the following criteria to each medical event/condition that was considered for mandatory reporting:

1. There must be a clear case definition and a single standard code (from the *International Classification of Diseases*, 9th revision).
2. An intervention must be available and/or a public health response indicated.
3. A sufficient, timely source of the required information must not already exist.
4. The condition/event must also meet one of the following criteria:
    - It represents an inherent, significant threat to public health by having the potential to affect large numbers of people, to be widely transmitted within a population, or to have severe/life threatening clinical manifestations.
    - It represents a significant military operational threat by having the potential to disrupt military training, deployment, or operations.
    - It is commonly reportable by state or federal laws, regulations, or guidelines.

Individual services may require reporting of additional conditions; please refer to service-specific instructions for details.

3.0 TRI-SERVICE REPORTABLE MEDICAL EVENT LIST

Condition	ICD-9 Code
1. Amebiasis	006
2. Anthrax	022
3. Biological Warfare Agent Exposure	E997.1
4. Botulism	005.1
5. Brucellosis	023
6. Campylobacter	008.43
7. Carbon Monoxide Poisoning	986
8. Chemical Agent Exposure	989
9. Chlamydia	099.41
10. Cholera	001
11. Coccidioidomycosis	114
12. Cold Weather Injury (All)	
a. CWI, Frostbite	991.3
b. CWI, Hypothermia	991.6
c. CWI, Immersion Type	991.4
d. CWI, Unspecified	991.9
13. Cryptosporidiosis	136.8
14. Cyclospora	007.8
15. Dengue Fever	061
16. Diphtheria	032
17. E. Coli 0157:H7	008.04
18. Ehrlichiosis	083.8
19. Encephalitis	062
20. Filariasis	125
21. Giardiasis	007.1
22. Gonorrhea	098
23. H. Influenzae, Invasive	038.41
24. Hantavirus Infection	079.81
25. Heat Injuries	
a. Heat Exhaustion	992.3
b. Heat Stroke	992.0
26. Hemorrhagic Fever	065
27. Hepatitis A	070.1
28. Hepatitis B	070.3
29. Hepatitis C	070.51
30. Influenza	487
31. Lead Poisoning	984
32. Legionellosis	482.8

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33.	Leishmaniasis (all)	
	a. Leishmaniasis, Cutaneous	085.4
	b. Leishmaniasis, Mucocutaneous	085.5
	c. Leishmaniasis, Unspecified	085.9
	d. Leishmaniasis, Visceral	085.0
34.	Leprosy	030
35.	Leptospirosis	100
36.	Listeriosis	027.0
37.	Lyme Disease	088.81
38.	Malaria (All)	
	a. Malaria, Falciparum	084.0
	b. Malaria, Malariae	084.2
	c. Malaria, Ovale	084.3
	d. Malaria, Unspecified	084.6
	e. Malaria, Vivax	084.1
39.	Measles	055
40.	Meningococcal Disease	
	a. Meningitis	036.0
	b. Septicemia	036.2
41.	Mumps	072
42.	Pertussis	033
43.	Plague	020
44.	Pneumococcal Pneumonia	481
45.	Poliomyelitis	045
46.	Q Fever	083.0
47.	Rabies, Human	071
48.	Relapsing Fever	087
49.	Rheumatic Fever, Acute	390
50.	Rift Valley Fever	066.3
51.	Rocky Mountain Spotted Fever	082.0
52.	Rubella	056
53.	Salmonellosis	003
54.	Schistosomiasis	120
55.	Shigellosis	004
56.	Smallpox	050
57.	Streptococcus, Group A, Invasive	038.0
58.	Syphilis (All)	
	a. Syphilis, Congenital	090
	b. Syphilis, Latent	096
	c. Syphilis, Primary/Secondary	091
	d. Syphilis, Tertiary	095
59.	Tetanus	037
60.	Toxic Shock Syndrome	785.59
61.	Trichinosis	124
62.	Trypanosomiasis	086
63.	Tuberculosis, Pulmonary	011

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64. Tularemia	021
65. Typhoid Fever	002
66. Typhus Fever	080
67. Urethritis, Non-Gonococcal	099.40
68. Vaccine, Adverse Event	979.9
69. Varicella, Active Duty Only	052
70. Yellow Fever	060

NOTE: *HIV, AIDS, suicides and occupational injuries/illnesses are reported through other mechanisms and not included in this list. Please refer to service-specific instructions for details.*

4.0 CASE DEFINITIONS

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The following case definitions are for the most part based on one or more existing sources indicated by reference numbers (e.g., ***Reference 1***). See Section 7.0, **References**, for full citations.

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4.1 AMEBIASIS

ICD-9: 006 ***Reference 2***

Clinical Description

Infection of the large intestine by *Entamoeba histolytica* may result in an illness of variable severity ranging from mild, chronic diarrhea to fulminant dysentery. Infection also may be asymptomatic. Extraintestinal infection can also occur (e.g., hepatic abscess).

Laboratory Criteria for Diagnosis

1. ***Intestinal Amebiasis:*** Either of the following:
   - Demonstration of cysts or trophozoites of *E. histolytica* in stool.
   - Demonstration of trophozoites in tissue biopsy or ulcer scrapings by culture or histopathology.

2. ***Extraintestinal Amebiasis:*** Demonstration of *E. histolytica* trophozoites in extraintestinal tissue.

Case Classification

1. ***Confirmed Intestinal Amebiasis:*** A clinically compatible case that is laboratory-confirmed.
2. ***Confirmed Extraintestinal Amebiasis:*** A parasitologically- confirmed infection of extraintestinal tissue, or in symptomatic persons (with clinical or radiographic findings consistent with extraintestinal infection), demonstration of specific antibodies against *E. histolytica* as measured by indirect hemagglutination or other reliable immunodiagnostic test (e.g., enzyme-linked immunosorbent assay [ELISA]).

Note: *Asymptomatic intestinal carriage of E. histolytica should not be reported. In asymptomatic persons, a positive serologic test does not necessarily indicate extraintestinal amebiasis.*

Required Comments

None.

Additional Considerations

Document the site of infection and patient's travel history.

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4.2 ANTHRAX

ICD-9: 022 ***Reference 2***

EXCLUDES: Probable BW attack.

Clinical Description

An illness with acute onset that takes several distinct clinical forms, including:

1. ***Cutaneous:*** A skin lesion that evolves over a period of 2-6 days from a papule through a vesicular stage to a depressed black eschar, usually with surrounding edema.
2. ***Inhalation:*** A brief prodrome resembling a viral respiratory illness, followed by development of hypoxia and dyspnea, with radiographic evidence of mediastinal widening.
3. ***Intestinal:*** Severe abdominal distress followed by fever and signs of septicemia.
4. ***Oropharyngeal*:** Mucosal lesion in the oral cavity or oropharynx, cervical adenopathy and edema, and fever.
5. ***Meningeal*:** Acute onset of high fever with meningeal signs and symptoms, frequently with convulsions and loss of consciousness.

Laboratory Criteria for Diagnosis

Any of the following:

- Isolation of *Bacillus anthracis* from a clinical specimen.
- Anthrax electrophoretic immunotransblot (EITB) reaction to the protective antigen and/or lethal factor bands in one or more serum samples obtained after onset of symptoms.
- Demonstration of *B. anthracis* in a clinical specimen by immunofluorescence.
- Positive serology (ELISA, Western blot, toxin detection, chromatographic assay, fluorescent antibody test [FAT], PCR).

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

Specify the clinical form of anthrax and the patient's vaccination history.

Additional Considerations

Document site and source of infection.

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4.3 BIOLOGICAL WARFARE AGENT EXPOSURE

ICD-9: E997.1 ***References 5 & 10***

EXCLUDES: Naturally occurring incidences of potential biologic agents.

Clinical Description

Clinical descriptions for most of the major biological threats are listed under the respective disease agents (anthrax, brucellosis, botulism, plague, Q fever, tularemia, smallpox, encephalitis, and hemorrhagic fever).

However, there are also several toxins that do not stand alone as reportable disease agents, but which can be used as biologic weapons. These toxins, as a class, are difficult both to recognize and to specifically identify. They are generally naturally occurring proteins capable of reacting with human immune system antibodies.

The following description of Staphylococcal Enterotoxin B (SEB) is representative of toxins in general:

> *Inhalation of weaponized SEB causes an acute onset of fever, headache, chills, myalgia, and a non-productive cough. More severe cases may develop dyspnea and retrosternal chest pain. Nausea, vomiting, and diarrhea will also occur in many patients due to inadvertently swallowed toxin, and fluid losses can be marked.*

Laboratory Criteria for Diagnosis

Specific laboratory diagnostic criteria are listed with the respective pathologic agents.

Toxins in serum are typically transient; however, antigenic metabolites often accumulate in the urine and can be detected for several hours post-exposure. Therefore, urine samples should be obtained and tested. Because most patients develop a significant antibody response to toxins, acute and convalescent serum should be drawn to aid in making a retrospective diagnosis. Additionally, toxins may be identified by ELISA in nasal swabs taken within 24 hours after exposure.

Case Classification

Probable: A clinically compatible case that is probably the result of a biological warfare (BW) attack. Indicators of a potential BW attack are:

- The presence of a vector-borne disease in areas lacking suitable vectors or reservoirs.
- Rates significantly above normal background cases.
- Epidemic curves demonstrating large numbers of primary cases when propagated epidemics would be more likely.
- Disease distribution patterns suggesting aerosolized transmission (cases clustered downwind from a suspected source).

Confirmed: A clinically compatible case that is laboratory-confirmed and the result of biological warfare.

Note: *Report probable as well as confirmed cases.*

Required Comments

Specify the pathogen, location and route of exposure, and circumstances surrounding the exposure.

Additional Considerations

None.

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4.4 BOTULISM

ICD-9: 005.1 ***Reference 2***

EXCLUDES: Probable BW attack.

Clinical Description

Clostridium botulinum causes three major forms of illness characterized by the route of infection:

1. ***Food-borne***.
2. ***Infantile***.
3. ***Wound***.

Common symptoms include diplopia, blurred vision, and bulbar weakness. Symmetric paralysis may progress rapidly. In infants (aged < 1 year), constipation, poor feeding and "failure to thrive" may be followed by progressive weakness, impaired respiration and death.

Laboratory Criteria for Diagnosis

Either of the following:

- Detection of *C. botulinum* toxin in serum, stool or patient's food.
- Isolation of *C. botulinum* from stool or a wound.

Case Classification

Confirmed: A clinically compatible case (with either a fresh contaminated wound **OR** an epidemiologic link to a contaminated food source) with lab confirmation.

Required Comments

Specify the clinical form of botulism.

Additional Considerations

Document source of infection.

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4.5 BRUCELLOSIS

ICD-9: 023 ***References 2 & 7***

EXCLUDES: Probable BW attack.

Clinical Description

An illness characterized by acute or insidious onset of fever, night sweats, undue fatigue, anorexia, weight loss, headache, arthralgia and myalgia.

Laboratory Criteria for Diagnosis

Any of the following:

- Isolation of *Brucella* sp. from a clinical specimen.
- Fourfold or greater rise in *Brucella* agglutination titer between acute and convalescent serum specimens obtained ≥ 2 weeks apart and studied at the same laboratory.
- Demonstration by immunofluorescence of *Brucella* sp. in a clinical specimen.
- ELISA (IgA, IgG, IgM), 2-Mercaptoethanol test, complement fixation test, Coombs, fluorescent antibody test (FAT), and radioimmunoassay for detecting antilipopolysaccharide antibodies; and counterimmunoelectrophoresis (CIEP) for antibodies' anticytosolic proteins.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document infection source and potential occupational exposure (e.g., veterinarian, lab worker, etc.).

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4.6 CAMPYLOBACTER INFECTION

ICD-9: 008.43 ***Reference 2***

Clinical Description

An infection that may result in a diarrheal illness of variable severity.

Laboratory Criteria for Diagnosis

Isolation of *Campylobacter jejuni* from any clinical specimen.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Source, if known, and whether case is part of an outbreak.

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4.7 CARBON MONOXIDE POISONING

ICD-9: 986 ***Reference 6***

Clinical Description

Carbon monoxide poisoning produces vague symptoms of fatigue, headache, nausea, vomiting, ataxia and mental status changes, including giddiness and decreasing mental alertness. Progressive exposure results in loss of consciousness and death.

Symptoms, beginning with headaches, generally occur at above 10% carboxyhemoglobin in non-smokers (higher in smokers).

Laboratory Criteria for Diagnosis

Elevated carboxyhemoglobin levels (> 10% in non-smokers, > 15% in smokers).

Case Classification

Confirmed: A clinically compatible case with laboratory evidence of increased carboxyhemoglobin.

Required Comments

None.

Additional Considerations

Document the source of exposure, whether housing is on post or off (when relevant), whether the patient is a smoker, and the carboxyhemoglobin level.

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4.8 CHEMICAL AGENT EXPOSURE

ICD-9: 989 ***References 5 & 10***

INCLUDES: Nerve Agents, Blister Agents, Blood Agents, Riot Control Agents and Pulmonary Irritant Agents.

Clinical Description

The clinical manifestation of a chemical agent exposure varies by the agent involved:

1. ***Nerve Agents:*** (GA, GB, GD, GF, VX) Acetylcholinesterase inhibitors that rapidly produce symptoms associated with an overabundance of acetylcholine, such as rhinorrhea, salivation, emesis, diarrhea, dyspnea, convulsions and apnea.
2. ***Blister Agents:*** (H, HD, L) Delayed appearance of erythema, blisters, irritation of eyes, dyspnea and cough.
3. ***Blood Agents:*** (AC, CK) Rapid onset of convulsions, loss of consciousness and apnea.
4. ***Pulmonary Irritants:*** (CG) Delayed onset of dyspnea and coughing.
5. ***Riot Control:*** (CS, CN) Immediate burning, stinging of eyes, nose, airways and skin.

Laboratory Criteria for Diagnosis

Detection of a chemical agent by M256A1, M8 paper, M9 paper, Chemical Agent Monitor (CAM), or M8A1 Alarm.

Case Classification

Confirmed: A clinically compatible case with either laboratory confirmation of exposure **OR** known agent exposure (e.g., riot control gas, demilitarization operation).

Required Comments

Specify the chemical agent involved.

Additional Considerations

Document the circumstances surrounding exposure and field use of antidotes/prophylaxis (if applicable).

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4.9 CHLAMYDIA TRACHOMATIS, GENITAL INFECTIONS

ICD-9: 099.41 ***Reference 3***

Clinical Description

Infection with *Chlamydia trachomatis* may result in urethritis, epididymitis, cervicitis, acute salpingitis, or other syndromes when sexually transmitted; however, the infection is often asymptomatic in women. Perinatal infections may result in inclusion conjunctivitis and pneumonia in newborns. Other syndromes caused by *C. trachomatis* include lymphogranuloma venereum and trachoma, which are not currently considered reportable.

Laboratory Criteria for Diagnosis

Either of the following:

- Isolation of *C. trachomatis* by culture.
- Demonstration of *C. trachomatis* in a clinical specimen by detection of antigen or nucleic acid.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Note: *Only genital infections are reportable*

Required Comments

None.

Additional Considerations

None.

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4.10 CHOLERA

ICD-9: 001 ***Reference 2***

Clinical Description

An illness of variable severity characterized by acute watery diarrhea, with or without vomiting.

Laboratory Criteria for Diagnosis

Either of the following:

- Isolation of toxigenic (i.e., cholera toxin-producing) *Vibrio cholerae* 01 or 0139 from stool or vomitus.
- Serologic evidence of recent infection.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Note: *Illnesses caused by strains of* ***V. cholerae*** *other than toxigenic* ***V. cholerae*** *01 or 0139 should not be reported as cases of cholera. Only confirmed cases should be reported.*

Required Comments

None.

Additional Considerations

Document the patient's travel history (preceding 1 week) and the etiologic agent of the case (either *V. cholerae* 01 or *V. cholerae* 0139).

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4.11 COCCIDIOIDOMYCOSIS

ICD-9: 114 ***Reference 2***

Clinical Description

Infection may be asymptomatic, or may produce acute or chronic disease. Although the disease initially resembles an influenza-like febrile illness primarily involving the bronchopulmonary system, dissemination can occur to multiple organ systems.

Clinical Case Definition

One or more of the following:

- Pneumonia or other pulmonary lesion, diagnosed by chest radiograph.
- Erythema nodosum or erythema multiforme rash.
- Involvement of bones, joints, or skin by dissemination.
- Meningitis.
- Involvement of viscera and lymph nodes.

Laboratory Criteria for Diagnosis

Any of the following:

- Cultural, histopathologic, or molecular evidence of presence of *Coccidioides immitis*.
- Positive serologic test for coccidioidal antibodies in serum or cerebrospinal fluid by any of the following:
  - Detection of coccidioidal immunoglobulin M (IgM) by immunodiffusion, enzyme immunoassay (EIA), latex agglutination, or tube precipitin.
  - Detection of rising titer of coccidioidal immunoglobulin G (IgG) by immunodiffusion, EIA, or complement fixation.
- Coccidioidal skin-test conversion from negative to positive after onset of clinical signs and symptoms.

Case Classification

Confirmed: A case that meets the clinical case definition and is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the location and nature of potential exposures.

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4.12 COLD WEATHER INJURIES

ICD-9: 991.3 (Frostbite) ***Reference 9***
991.4 (Immersion Type)
991.6 (Hypothermia)
991.9 (Unspecified)

INCLUDES: Service Member cases only.

Clinical Description

1. ***Cold/Wet Injuries:*** Localized non-freezing injuries, usually of extremities. Includes, in increasing order of severity, chilblains, pernio and trench foot. May occur in temperatures as high as 60°F with prolonged exposure.

2. ***Cold/Dry Injuries:*** Frostbite is the most common of these injuries. It results from the actual crystallization of tissue fluids in the skin or subcutaneous tissues after exposure to temperatures below freezing.

3. ***Hypothermia:*** The result of a generalized lowering of core body temperature to below 95°F. It can result from either dry-land whole body exposure or immersion in cold water. Freezing temperatures are not required to produce hypothermia.

Clinical Case Definition

Frostbite:

- **1st degree:** Superficial epidermal injury. Mobility unaffected, no blistering. Complete healing in 7-10 days; residual cold sensitivity is may occur.
- **2nd degree:** Involves the entire epidermis; forms bulla after thawing. Heals in 3-4 weeks; residual cold sensitivity may occur.
- **3rd degree:** Involves the dermis at least to the reticular layer. When frozen, mobility is limited. Characterized by hemorrhagic bullae and swelling. Permanent tissue loss may occur.
- **4th degree:** Full skin thickness and underlying tissue damage. No mobility of the frozen tissue; mobility not recovered with thawing. No bullae or edema, but necrotic changes occur rather early. Significant permanent damage is typical.

Hypothermia: Body core temperature < 95°F, unless the hypothermia is the result of immersion.

Immersion Type: Chilblains, pernio, trench foot or whole body immersion resulting in hypothermia.

Unspecified: Any cold weather injury (CWI) that does not fit the above categories.

Laboratory Criteria for Diagnosis

None. Cold injuries are diagnosed clinically.

Case Classification

Confirmed: A clinically compatible case with an appropriate history of cold exposure.

Required Comments

Note if injury was duty related.

Additional Considerations

Document the anatomic location of injury, degree of frostbite, core body temperature (for hypothermia), and any unusual circumstances.

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4.13 CRYPTOSPORIDIOSIS

ICD-9: 136.8 ***Reference 2***

Clinical Description

An illness caused by the protozoan *Cryptosporidium parvum* and characterized by diarrhea, abdominal cramps, loss of appetite, low-grade fever, nausea, and vomiting. Infected persons may be asymptomatic. The disease can be prolonged and life-threatening in severely immunocompromised persons.

Laboratory Criteria for Diagnosis

Any of the following:

- Demonstration of *Cryptosporidium* oocysts in stool.
- Demonstration of *Cryptosporidium* in intestinal fluid or small-bowel biopsy specimens.
- Demonstration of *Cryptosporidium* antigen in stool by a specific immunodiagnostic test (e.g., ELISA).

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

None.

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4.14 CYCLOSPORA INFECTION

ICD-9: 007.8 ***Reference 2***

Clinical Description

An illness of variable severity caused by the protozoan *Cyclospora cayetanensis* and commonly characterized by watery diarrhea, loss of appetite, weight loss, abdominal bloating and cramping, increased flatus, nausea, fatigue, and low-grade fever. Vomiting also may be noted. Relapses and asymptomatic infections can occur.

Note: *Direct person-to-person transmission is unlikely because Cyclospora oocysts are not infectious at the time of excretion.*

Laboratory Criteria for Diagnosis

Either of the following:

- Demonstration of *Cyclospora* oocysts (by morphologic criteria or by demonstration of sporulation).
- Demonstration of *Cyclospora* DNA (by polymerase chain reaction) in stool, duodenal/jejunal aspirates or small-bowel biopsy specimens.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the source and whether the case is part of an outbreak.

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4.15 DENGUE FEVER

ICD-9: 061 ***References 2 & 7***

Clinical Description

An acute febrile illness characterized by frontal headache, retro-ocular pain, muscle and joint pain, rash and leukopenia. The principal vector is the *Aedes aegypti* mosquito and transmission usually occurs in tropical or subtropical areas. Severe manifestations (e.g., dengue hemorrhagic fever and dengue shock syndrome) are rare but may be fatal.

Clinical Case Definition

Dengue Hemorrhagic Fever: A probable or confirmed case of dengue with hemorrhagic tendencies evidenced by one or more of the following:

- Positive tourniquet test.
- Petechiae, ecchymoses or purpura.
- Bleeding from mucosa, gastrointestinal tract, injection sites or other sites.
- Hematemesis, melena, and thrombocytopenia (100,000 cells per mm^3 or less) plus evidence of plasma leakage due to increased vascular permeability manifested by one or more one of the following:
  - A ≥ 20% rise in average hematocrit for age and sex.
  - A ≥ 20% drop in hematocrit following volume replacement treatment compared to baseline.
  - Signs of plasma leakage (pleural effusion, ascites, and hypoproteinemia).

Dengue Shock Syndrome: All the above criteria for DHF plus evidence of circulatory failure manifested by either:

- Rapid and weak pulse with narrow pulse pressure (≤ 20 mm Hg)
- Hypotension for age, restlessness, and cold, clammy skin.

Laboratory Criteria for Diagnosis

Any of the following:

- Isolation of dengue virus from serum and/or autopsy tissue samples.
- Demonstration of a fourfold or greater rise or fall in reciprocal immunoglobulin G (IgG) or immunoglobulin M (IgM) antibody titers to one or more dengue virus antigens in paired serum samples.
- Demonstration of dengue virus antigen in autopsy tissue or serum samples by immunohistochemistry or by viral nucleic acid detection.
- Detection of viral genomic sequences in autopsy tissue, serum or CSF samples by polymerase chain reaction (PCR).

Case Classification

Probable: A clinically compatible case with supportive serologic findings:

- A reciprocal IgG antibody titer ≥ 1280.
- A positive IgM antibody test on a single acute (late) serum.
- Convalescent serum to one or more dengue virus antigens).

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

Indicate whether the case is complicated by DHF or DSS.

Additional Considerations

Document the patient's travel history (preceding 2 months), and the dengue serotype.

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4.16 DIPHTHERIA

ICD-9: 032 ***Reference 2***

Clinical Description

An upper respiratory tract illness characterized by sore throat, low-grade fever, and adherent membranes of the tonsil(s), pharynx, and/or nose.

Laboratory Criteria for Diagnosis

Either of the following:

- Isolation of *Corynebacterium diphtheriae* from a clinical specimen.
- Histopathologic diagnosis of diphtheria.

Case Classification

Confirmed: A clinically compatible case that is either laboratory-confirmed **OR** epidemiologically linked to a laboratory-confirmed case.

Note: *Respiratory disease caused by nontoxigenic C. diphtheriae should be reported as diphtheria. Cutaneous diphtheria should not be reported.*

Required Comments

Include the patient's diphtheria immunization history.

Additional Considerations

Specify the patient's age in months if < 1 year, source of infection, and the patient's travel history (preceding 2 weeks).

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4.17 ESCHERICHIA COLI 0157:H7

ICD-9: 008.04 ***Reference 2***

Clinical Description

An infection of variable severity characterized by diarrhea (often bloody) and abdominal cramps. The illness may be complicated by hemolytic uremic syndrome (HUS) or thrombotic thrombocytopenic purpura (TTP). Asymptomatic infections may also occur.

Laboratory Criteria for Diagnosis

Either of the following:

- Isolation of *Escherichia coli* 0157:H7 from a specimen.
- Isolation of Shiga toxin-producing *E. coli* 0157:NM from a clinical specimen.

Note: *Strains of E. coli 0157:H7 designated "NM" have lost the flagella "H" antigen and become nonmotile.*

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the infection source and whether the case is part of an outbreak.

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4.18 EHRLICHIOSIS

ICD-9: 083.8 ***Reference 2***

Clinical Description

A tick-borne febrile illness most commonly characterized by acute onset of headache, myalgia, rigors and/or malaise.

Clinical laboratory findings may include:

- Intracytoplasmic microcolonies (morulae) in leukocytes of peripheral smear, cerebrospinal fluid (CSF), or bone marrow aspirate or biopsy.
- Cytopenias (especially thrombocytopenia and leukopenia).
- Elevated liver enzymes (especially ALT and AST).

Ehrlichiosis has two clinically similar but serologically distinct forms:

1. ***Human Granulocytic Ehrlichosis (HGE):*** Caused by infection with an *Ehrlichia equi*-like agent and found primarily in the upper midwestern and northeastern United States.
2. ***Human Monocytic Ehrlichiosis (HME):*** Caused by *Ehrlichia chaffeensis* infection and found primarily in the southeastern quadrant of the United States.

Laboratory Criteria for Diagnosis

Any of the following:

- Fourfold or greater change in antibody titer to *Ehrlichia* sp. antigen by immunofluorescence antibody (IFA) test in acute and convalescent specimens ideally taken ≥ 4 weeks apart. HME diagnosis requires *E. chaffeensis* and HGE currently requires *E. equi* or HGE-agent antigen.
- Positive polymerase chain reaction assay. Distinct primers are used for the diagnosis of HGE and HME.
- Intracytoplasmic morulae identified in blood, bone marrow, or CSF leukocytes, and an IFA antibody titer ≥ 64.

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Case Classification

Probable: A clinically compatible case with either:

- A single IFA serologic titer ≥ 64.
- Intracytoplasmic morulae identified in blood, bone marrow or CSF leukocytes.

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the patient's travel history (preceding 1 month), particularly noting the geographic location of the patient when known tick bites occurred and/or of recent field exercises.

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4.19 ENCEPHALITIS

ICD-9: 062 ***Reference 2***

INCLUDES: Arboviral Encephalitis, Tick-borne encephalitis.

EXCLUDES: Bacterial Meningoencephalitis, RMSF, Rift Valley Fever, Rabies

Clinical Description

Encephalitis is a broad category of central nervous system infections. Symptoms can include headache, confusion or other alteration in sensorium, nausea, and vomiting. Signs may include fever, meningismus, cranial nerve palsies, paresis or paralysis, sensory deficits, altered reflexes, convulsions, abnormal movements, and coma of varying degree.

Arboviral infections may result in a febrile illness of variable severity associated with neurologic symptoms ranging from headache to aseptic meningitis or encephalitis. The seasonality of arboviral transmission is variable and depends on the geographic location of exposure, the specific cycles of viral transmission, and local climatic conditions.

Laboratory Criteria for Diagnosis

Any of the following:

- Fourfold or greater change in serum antibody titer.
- Isolation of virus from, or demonstration of viral antigen or genomic sequences in, tissue, blood, cerebrospinal fluid (CSF), or other body fluid.
- Specific IgM antibody by enzyme immunoassay (EIA) antibody captured in CSF or serum**.** The serum IgM antibodies test should be confirmed by demonstration of immunoglobulin G antibodies by another serologic assay (e.g., neutralization or hemagglutination inhibition).

Case Classification

Probable: Viral transmission is likely, with the following supportive serology: a stable (≤ twofold change) elevated antibody titer to an arbovirus (e.g., ≥ 320 by hemagglutination inhibition, ≥ 128 by complement fixation, ≥ 256 by immunofluorescence, ≥ 160 by neutralization, or ≥ 400 by enzyme immunoassay IgM).

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

Specify the etiologic agent of encephalitis (e.g., Tick-borne Encephalitis [TBE], Japanese B Encephalitis [JE]) and the patient's relevant immunization history.

Additional Considerations

Document the patient's travel and exposure histories.

TOC

4.20 FILARIASIS

ICD-9: 125 ***Reference 7***

INCLUDES: Onchocerciasis and Loa-loa.

Clinical Description

Filarial infections are an insect-borne group of diseases, including those caused by the organisms *Wuchereria bancrofti*, *Brugia malayi*, *Loa-loa* and *Onchocerca volvulus*.

1. ***Infections caused by Wuchereria and Brugia:*** Classical filariasis; caused by lymphatic-dwelling filariae transmitted by mosquitoes. Acute clinical symptoms may include recurrent fevers, lymphadenitis and retrograde lymphangitis, or tropical pulmonary eosinophilia syndrome characterized by nocturnal "asthma", low-grade fever and eosinophilia.

2. ***Loa-loa and Onchocerciasis:*** Transmitted by flies. Loa-loa is characterized by transient swellings and pruritis, often with eosinophilia. Onchocerciasis causes fibrous subcutaneous nodules, pruritis, pigmentation changes, and blindness in severe infections.

Laboratory Criteria for Diagnosis

Microfilaria-positive, antigen-positive or biopsy-positive clinical speci-men.

Case Classification

A clinically compatible case that is laboratory-confirmed.

Required Comments

Specify the etiologic agent of filariasis.

Additional Considerations

Document the patient's long-term travel history.

TOC

4.21 GIARDIASIS

ICD-9: 007.1 ***Reference 2***

Clinical Description

An illness caused by the protozoan *Giardia lamblia* and characterized by diarrhea, abdominal cramps, bloating, weight loss, or malabsorption. Infected persons may be asymptomatic.

Laboratory Criteria for Diagnosis

Any of the following:

- Demonstration of *G. lamblia* cysts in stool.
- Demonstration of *G. lamblia* trophozoites in stool, duodenal fluid, or small-bowel biopsy.
- Demonstration of *G. lamblia* antigen in stool by a specific immunodiagnostic test (e.g., ELISA).

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the source of infection (e.g. the patient's camping/travel history).

TOC

4.22 GONORRHEA

ICD-9: 098 ***Reference 3***

Clinical Description

A sexually transmitted infection commonly manifested by urethritis, cervicitis, or salpingitis. Infection may be asymptomatic, particularly in women.

Laboratory Criteria for Diagnosis

Any of the following:

- Isolation of typical gram-negative, oxidase-positive diplococci (presumptive *Neisseria gonorrhoeae*) from a clinical specimen.
- Demonstration of *N. gonorrhoeae* in a clinical specimen by detection of antigen or nucleic acid.
- Observation of gram-negative intracellular diplococci in a urethral smear obtained from a male.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

None.

TOC

4.23 HAEMOPHILUS INFLUENZAE (INVASIVE DISEASE)

ICD-9: 038.41 ***Reference 2***

Clinical Description

Invasive disease caused by *Haemophilus influenzae* may produce any of several clinical syndromes including meningitis, bacteremia, epiglottitis, or pneumonia.

Laboratory Criteria for Diagnosis

Isolation of *H. influenzae* from a normally sterile site (e.g., blood or cerebrospinal fluid [CSF]; or less commonly, from joint, pleural, or pericardial fluid).

Note: *Positive antigen test results from urine or serum samples are unreliable for diagnosis of H. influenzae disease.*

Case Classification

Probable: A clinically compatible case with detection of *H. influenzae* type B antigen in CSF.

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the clinical form of the infection. For children < 1 year, specify age in months. For all children, indicate HiB immunization history.

TOC

4.24 HANTAVIRUS DISEASE

ICD-9: 079.81 ***Reference 2***

INCLUDES: Hantavirus Pulmonary Syndrome, Korean Hemorrhagic Fever, and Hemorrhagic Fever with Renal Syndrome.

Clinical Description

1. ***Hantavirus Pulmonary Syndrome (HPS):*** Commonly referred to as hantavirus disease, HPS is a febrile illness characterized by bilateral interstitial pulmonary infiltrates and respiratory compromise usually requiring supplemental oxygen and clinically resembling Acute Respiratory Disease Syndrome (ARDS). The typical prodrome consists of fever, chills, myalgia, headache, and gastrointestinal symptoms. Typical clinical laboratory findings include hemoconcentration, left shift in the white blood cell count, neutrophilic leukocytosis, thrombocytopenia, and circulating immunoblasts.

2. ***Hemorrhagic Fever with Renal Syndrome (HFRS, includes Korean Hemorrhagic Fever):*** Characterized by acute onset of fever, lower back pain, hemorrhagic manifestations, and renal involvement. The disease has five clinical phases: febrile, hypotensive, oliguric, diuretic and convalescent.

Clinical Case Definition

1. ***HPS:*** One or more of the following:

   - A febrile illness characterized by bilateral diffuse interstitial edema that may radiographically resemble ARDS and respiratory compromise requiring supplemental oxygen, all developing within 72 hours of hospitalization and
     occurring in a previously healthy person.
   - An unexplained respiratory illness resulting in death, with an autopsy examination demonstrating noncardiogenic pulmonary edema without an identifiable cause.

   Since the clinical illness is nonspecific and ARDS is common, a useful screening guideline is that in general, a predisposing medical condition (e.g., chronic pulmonary disease, malignancy, trauma, burns, or surgery) is more likely to cause ARDS than HPS. Patients who have such underlying conditions and ARDS need not be tested for hantavirus.

2. ***HFRS:*** A febrile illness characterized by variable hemorrhagic symptoms, shock, proteinuria, leukocytosis, hemoconcentration, thrombocytopenia and an elevated BUN.

Laboratory Criteria for Diagnosis

Any of the following:

- Detection of hantavirus-specific IgM or rising titers of hantavirus-specific IgG.
- Detection of hantavirus-specific RNA sequence by PCR in clinical specimens.
- Detection of hantavirus antigen by immunohistochemistry.

Note: *Laboratory testing should be performed or confirmed at a reference laboratory.*

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

Specify the form of hantavirus disease (pulmonary or hemorrhagic/ renal).

Additional Considerations

Document the patient's recent (preceding 2 months) travel history, including field exercises and outdoor activity.

TOC

4.25 HEAT INJURIES

ICD-9: 992.0 (Heat Stroke) ***References 6 & 8***
992.3 (Heat Exhaustion)

INCLUDES: Service Member cases only.

Clinical Description

1. ***Heat Exhaustion:*** Occurs during exercise in hot conditions, resulting in collapse or inability to continue work.

2. ***Heat Stroke:*** Characterized by clinically significant tissue damage-especially hepatic injury, renal damage, DIC, rhabdomyolysis and encephalopathy. Altered mental status, caused by heat injury to the brain, is common.

Clinical Case Definition

1. ***Heat Exhaustion:*** A variable combination of dizziness, fatigue, headache, thirst and GI distress with normal or slightly altered mental status and an elevated core body temperature. Reportable cases are those that require medical intervention and result in more than 4 hours of lost duty time.

2. ***Heat Stroke:*** Significantly altered mental status at presentation and/or elevation of muscle (CPK) and hepatic (ALT, AST) enzymes at 24 hours.

Laboratory Criteria for Diagnosis

None. Heat injuries are diagnosed clinically.

Case Classification

Confirmed: A case that meets the clinical case definition.

Note: *All heat exhaustion or heat stroke cases that require medical intervention or result in lost duty time are reportable.*

Required Comments

Note if duty related.

Additional Considerations

Document the patient's core body temperature and the precipitating activity.

TOC

4.26 HEMORRHAGIC FEVER

ICD-9: 065 ***Reference 7***

INCLUDES: Arenaviral hemorrhagic fevers of South America (Junin, Machupo, Guanarito, Sabia hemorrhagic fevers), Arthropod-borne viral hemorrhagic fevers (e.g., Crimean Congo fever), Omsk Hemorrhagic Fever (OHF), Kyasanur Forest Disease (KFD), Lassa fever, and Ebola-Marburg viral diseases.

EXCLUDES: Dengue Hemorrhagic Fever (report under Dengue), Korean Hemorrhagic Fever (report under Hantavirus), Hemorrhagic Fever with Renal Syndrome (report under Hantavirus), and Yellow Fever.

Clinical Description

Hemorrhagic fever is a broad category of viral diseases that present with varying degrees of fever, headache, malaise, and often a hemorrhagic crisis. The diseases are usually zoonotic, with transmission via an arthropod bite or aerosolization of virus from infected rodent excreta.

Laboratory Criteria for Diagnosis

Either of the following:

- Isolation of virus from blood, tissue or organs in mouse or cell culture.
- Serologic diagnosis (specifics vary by disease).

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

Specify the etiologic disease agent.

Additional Considerations

Document the patient's travel history and the source of infection.

TOC

4.27 HEPATITIS A

ICD-9: 070.1 ***Reference 2***

Clinical Description

A viral disease with abrupt onset of fever, malaise, anorexia, nausea and abdominal discomfort, followed within a few days by jaundice and/or elevation of serum aminotransferase levels (AST/ALT). Severity ranges from asymptomatic to severe, generally increasing with patient age.

Laboratory Criteria for Diagnosis

Either of the following:

- IgM antibody to Hepatitis A virus (anti-HAV) positive.
- Fourfold or greater rise in antibody titer in paired sera.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed **OR** a clinically compatible case that occurs in a person who has an epidemiologic link to a person who has laboratory-confirmed Hepatitis A (i.e., household or sexual contact with an infected person during the 15-50 days before the onset of symptoms).

Required Comments

Include the patient's Hepatitis A vaccination history.

Additional Considerations

Document the patient's travel history (preceding 2 months).

TOC

4.28 HEPATITIS B, ACUTE

ICD-9: 070.3 ***Reference 2***

Clinical Description

Only a small proportion of acute Hepatitis B infections may be clinically recognized; 30-50% of adults and < 10% of children with acute Hepatitis B infection will have icteric disease. In those with clinical illness, the onset is usually insidious with anorexia, vague abdominal discomfort, nausea and vomiting, sometimes arthralgias and rash, often progressing to jaundice. Fever may be absent or mild.

Laboratory Criteria for Diagnosis

IgM antibody to Hepatitis B core antigen (anti-HBc) positive or Hepatitis B surface antigen (HBsAg) positive.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Note: *Persons who have chronic hepatitis or who are identified as HbsAg positive should not be reported as having acute viral Hepatitis B unless they have evidence of acute illness compatible with viral hepatitis.*

Required Comments

Include the patient's Hepatitis B vaccination history.

Additional Considerations

Document potential occupational exposure (e.g., health care worker).

TOC

4.29 HEPATITIS C, ACUTE

ICD-9: 070.51 ***Reference 2***

Clinical Description

A viral disease normally presenting with insidious onset of anorexia, vague abdominal discomfort, nausea and vomiting, but progressing to jaundice less frequently than Hepatitis B. Approximately 75% of acute cases are inapparent, although subsequent chronic liver disease occurs in > 60% of cases.

Laboratory Criteria for Diagnosis

All of the following:

- Serum aminotransferase levels > 2.5 times the upper limit of normal.
- IgM anti-HAV negative.
- IgM anti-HBc negative (if done) or HBsAg negative.
- Hepatitis C virus antibody-positive (anti-HCV); result verified by a supplemental test.

Note: *Some persons may not test positive for anti-HCV for 6-9 months after the onset of symptoms.*

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document potential occupational exposure (e.g., health care worker).

TOC

4.30 INFLUENZA

ICD-9: 487 ***Reference 7***

Clinical Description

An acute viral disease of the respiratory tract characterized by fever, headache, myalgia, prostration, coryza, sore throat, and cough.

Clinical Case Definition

Sudden onset of fever > 102.2°F, respiratory symptoms, myalgia and headache.

Laboratory Criteria for Diagnosis

Either of the following:

- Isolation of virus from nasal or pharyngeal secretions or washings (preferred).
- Direct detection of influenza viral antigen from nasopharyngeal cells by fluorescent antibody (FA) or ELISA.

Case Classification

Confirmed: A case that meets the clinical case definition and is laboratory-confirmed.

Required Comments

Include the patient's influenza vaccination history.

Additional Considerations

List virus type (A or B) and, if available, subtype (e.g., H1N1)

TOC

4.31 LEAD POISONING

ICD-9: 984 ***Reference 6***

Clinical Description

Lead poisoning is in most cases a chronic disease caused by the gradual accumulation of a significant body burden of lead. Symptoms of lead toxicity are typically vague and ill-defined. They include intestinal colic, encephalopathy, peripheral neuropathies, mild anemia and bone marrow depression. In children, the presentations of developmental delay and encephalopathy (often manifested by convulsions) are more common.

Laboratory Criteria for Diagnosis

Blood lead levels > 40 mcg/dl in adults, > 10 mcg/dl in children.

Case Classification

Confirmed: A clinically compatible case that meets the laboratory criteria for elevation.

Note: *Asymptomatic elevated lead levels found in children by screening programs should not be reported.*

Required Comments

None.

Additional Considerations

Document the source of exposure, lead level, and potential occupational exposure (e.g., welder, painter).

4.32 LEGIONELLOSIS

ICD-9: 482.8 ***Reference 2***

Clinical Description

Legionellosis is associated with two clinically and epidemiologically distinct illnesses:

1. ***Legionnaires Disease:*** Characterized by fever, myalgia, cough and pneumonia.
2. ***Pontiac Fever:*** A milder illness without pneumonia.

Laboratory Criteria for Diagnosis

Any of the following:

- Isolation of *Legionella* sp. from respiratory secretions, lung tissue, pleural fluid, or other normally sterile fluids.
- Demonstration of a fourfold or greater rise in the reciprocal immunofluorescence antibody (IFA) titer to ≥ 128 against
  Legionella pneumophila serogroup 1 between paired acute and convalescent serum specimens.
- Detection of *L. pneumophila* serogroup 1 in respiratory secretions, lung tissue, or pleural fluid by direct fluorescent antibody testing.
- Demonstration of *L. pneumophila* serogroup 1 antigens in urine by radioimmunoassay or enzyme-linked immuno-sorbent assay.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

Specify the form of illness (Pontiac fever or Legionnaires).

Additional Considerations

Document the patient's recent (preceding 2 weeks) travel history.

TOC

4.33 LEISHMANIASIS

ICD-9: 085.0 (Leishmaniasis, Visceral) ***Reference 7***
085.4 (Leishmaniasis, Cutaneous)
085.5 (Leishmaniasis, Mucocutaneous)
085.9 (Leishmaniasis, Unspecified)

Clinical Description

Organisms of the genus *Leishmania* cause two major forms of disease:

1. ***Cutaneous and Mucosal/Mucocutaneous:*** Appearance of one or more lesions on uncovered parts of the body. The face, neck, arms and legs are the most common sites. A nodule appears at the site of inoculation, enlarges, and becomes an indolent ulcer. The sore remains in this stage for a variable time before healing, and leaves a depressed scar. Certain strains can disseminate and cause mucosal lesions in some
individuals; these sequelae involve nasopharyngeal tissues and can be disfiguring.

2. ***Visceral:*** A chronic systemic illness with persistent irregular fever, hepatosplenomegaly, lymphadenopathy, pancytopenia and weight loss as its main symptoms.

Laboratory Criteria for Diagnosis

1. ***Cutaneous and Mucosal/Mucocutaneous:***
   - Positive parasitology (stained smear or culture from the lesion).
   - Only for mucocutaneous: positive serology (IFA, ELI-SA).

2. ***Visceral:***
   Either of the following:
   - Positive parasitology (stained smears from bone marrow, spleen, liver, lymph node, blood or culture of the organism from a biopsy or aspirated material).
   - Positive serology (IFA, ELISA).

TOC

Case Classification

1. ***Confirmed Cutaneous and Mucosal/Mucocutaneous:*** A case that has a clinically compatible lesion with parasitological confirmation of the diagnosis (positive smear or culture) **OR** for mucocutaneous only, serological diagnosis.

2. ***Confirmed Visceral:*** A case exhibiting clinical signs with serological and/or parasitological confirmation of leishmaniasis.

Required Comments

None.

Additional Considerations

Document the patient's travel history (1 year for cutaneous forms, 6 years for visceral form).

TOC

4.34 LEPROSY

ICD-9: 030 ***Reference 2***

Clinical Description

A chronic bacterial disease that primarily affects the skin, as well as peripheral nerves and the mucosa of the upper airway. Clinical forms of leprosy vary according to cellular immune responses to *Mycobacterium leprae*. The following characteristics are typical of the major forms of the disease:

1. ***Tuberculoid (Paucibacillary):*** One or a few well-demarcated, hypopigmented, and anesthetic skin lesions, frequently with active, spreading edges and a clearing center. Peripheral nerve swelling or thickening also may occur.
2. ***Lepromatous (Multibacillary):*** A number of erythematous papules and nodules or an infiltration of the face, hands, and feet with lesions in a bilateral and symmetrical distribution that progress to thickening of the skin.
3. ***Borderline (Dimorphous):*** Skin lesions characteristic of both the tuberculoid and lepromatous forms.
4. ***Indeterminate:*** Early lesions, usually hypopigmented macules, without developed tuberculoid or lepromatous features.

Laboratory Criteria for Diagnosis

Demonstration of acid-fast bacilli in skin or dermal nerve, obtained from the full-thickness skin biopsy of a lepromatous lesion.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the source and clinical form of the infection.

TOC

4.35 LEPTOSPIROSIS

ICD-9: 100 ***References 2 & 7***

Clinical Description

An illness characterized by fever, headache, chills, myalgia, conjunctival suffusion, and less frequently by meningitis, rash, jaundice, or renal insufficiency. Fever may be biphasic.

Laboratory Criteria for Diagnosis

Any of the following:

- Fourfold or greater increase in *Leptospira* agglutination titer between acute and convalescent serum specimens obtained ≥ 2 weeks apart and studied at the same laboratory.
- Demonstration of *Leptospira* in a clinical specimen by immunofluorescence.
- Isolation and typing from blood or other clinical materials by culture of pathogenic leptospires.
- Positive serology, preferably by the Microscopic Agglutination Test (MAT). Ideally, the panel of *Leptospira* strains used for antigens should be representative of the locally occurring strains.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the patient's travel history and fresh water exposure (preceding 3 weeks).

TOC

4.36 LISTERIOSIS

ICD-9: 027.0 ***Reference 1***

Clinical Description

A bacterial disease that usually manifests as meningoencephalitis and/or septicemia in newborns and adults, and as abortion in pregnant women.

Laboratory Criteria for Diagnosis

Diagnosis is confirmed by isolation of the infectious agent, *Listeria monocytogenes,* from a clinical specimen (including CSF, blood, amniotic fluid, placenta, meconium, lochia, or gastric washings).

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

For children < 1 year, specify age in months.

TOC

4.37 LYME DISEASE

ICD-9: 088.81 ***Reference 2***

Clinical Description

A systemic tick-borne disease with protean manifestations, including dermatologic, rheumatologic, neurologic, and cardiac abnormalities. The best clinical marker for the disease is erythema migrans (EM), the initial skin lesion that occurs in 60%-80% of patients.

Clinical Case Definition

Erythema Migrans: For purposes of surveillance, EM is defined as a skin lesion that typically begins as a red macule or papule and expands (over a period of days to weeks) to form a large round lesion, often with partial central clearing. A single primary lesion must reach ≥ 5 centimeters in size. Secondary lesions may also occur. Annular erythematous lesions occurring within several hours of a tick bite represent hypersensitivity reactions and do not qualify as EM.

For most patients, the expanding EM lesion is accompanied by other acute symptoms, particularly fatigue, fever, headache, mildly stiff neck, arthralgia, or myalgia. These symptoms are typically intermittent. The diagnosis of EM must be made by an experienced clinician.

Late Manifestations: These include any of the following when an alternate explanation is not found:

- **Musculoskeletal System:** Recurrent brief attacks (weeks or months) of objective joint swelling in one or a few joints, sometimes followed by chronic arthritis in one or a few joints. Manifestations not considered as criteria for diagnosis include chronic progressive arthritis not preceded by brief attacks and chronic symmetrical polyarthritis. Additionally, arthralgia, myalgia, or fibromyalgia syndromes alone are not criteria for musculoskeletal involvement.
- **Nervous System:** Any of the following, alone or in combination: lymphocytic meningitis; cranial neuritis, particularly facial palsy (may be bilateral); radiculoneuropathy; or, rarely, encephalomyelitis. Encephalomyelitis must be confirmed by demonstration of antibody production against *B. burgdorferi* in the CSF, evidenced by a higher titer of antibody in CSF than in serum. Headache, fatigue, paresthesia, or mildly stiff neck alone are not criteria for neurologic involvement.
- **Cardiovascular System:** Acute onset of high grade (2^{nd} degree or 3^{rd} degree) atrioventricular conduction defects that resolve in days to weeks and are sometimes associated with myocarditis. Palpitations, bradycardia, bundle branch block, or myocarditis alone are not criteria for cardiovascular involvement.

Laboratory Criteria for Diagnosis

Either of the following:

- Isolation of *Borrelia burgdorferi* from a clinical specimen.
- Demonstration of diagnostic IgM or IgG antibodies to *B. burgdorferi* in serum or cerebrospinal fluid (CSF). A two-test approach using an ELISA or immunofluorescence antibody followed by Western blot is recommended.

Case Classification

Confirmed: A case that meets the clinical criteria for diagnosis of erythema migrans **OR** a case with at least one late manifestation that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the patient's travel history (preceding 1 year), geographical location of field exercises/outdoor activities, and acquisition of known tick bites.

TOC

4.38 MALARIA (ALL)

ICD-9: 084.0 (Malaria, Falciparum) ***Reference 2***
084.1 (Malaria, Vivax)
084.2 (Malaria, Malariae)
084.3 (Malaria, Ovale)
084.6 (Malaria, Unspecified)

Clinical Description

Signs and symptoms are variable, but almost universally include fever. Other commonly associated symptoms include headache, back pain, chills, sweats, myalgia, nausea, vomiting, diarrhea, and cough. Untreated *Plasmodium falciparum* infection can lead to coma, renal failure, pulmonary edema, and death. The diagnosis of malaria should be considered for any person who has these symptoms and who has traveled to an area in which malaria is endemic. Asymptomatic parasitemia can occur in long-term residents of areas in which malaria is endemic.

Laboratory Criteria for Diagnosis

Demonstration of malaria parasites in blood film.

Note: *Multiple smears taken over several days may be necessary for diagnosis.*

Case Classification

Confirmed: Laboratory-confirmed parasitemia.

Note: *Mixed-type infections should be reported separately (i.e., two reports for the same patient).*

Required Comments

Include the patient's travel history (long-term if case is *P. ovale* or *P. vivax*, preceding 1 month for *P. falciparum*) and prophylaxis regimen (if none, so state).

Additional Considerations

None.

TOC

4.39 MEASLES

ICD-9: 055 ***Reference 2***

Clinical Description

An acute, highly contagious viral rash illness with prodromal fever, conjunctivitis, coryza, and cough. Koplik spots on the buccal mucosa are also frequent. The rash typically appears on the 3rd to 5th day, beginning on the face and becoming generalized. Complications and secondary infections (otitis media, pneumonia, and encephalitis) are common.

Clinical Case Definition

All of the following:

- A generalized rash lasting ≥ 3 days.
- A temperature ≥ 101.0 F (≥ 38.3 C).
- Cough, coryza, or conjunctivitis.

Laboratory Criteria for Diagnosis

Any of the following:

- Positive serologic test for measles IgM antibody.
- Significant (fourfold) rise in measles antibody level by any standard serologic assay.
- Isolation of measles virus from a clinical specimen.

Case Classification

Confirmed: A case that is laboratory-confirmed **OR** a case that meets the clinical case definition and is epidemiologically linked to a confirmed case.

Note: *A laboratory-confirmed case does not need to meet the clinical case definition.*

Required Comments

Include the patient's measles vaccination history.

Additional Considerations

Specify the patient's age in months if < 1 year, travel history (preceding 3 weeks), and any known measles contacts.

TOC

4.40 MENINGOCOCCAL DISEASE

ICD-9: 036.0 (Meningitis) ***Reference 2***
036.2 (Septicemia)

Clinical Description

Meningococcal disease typically presents in one of two forms: meningitis or septicemia.

1. ***Meningococcal Meningitis:*** May follow an upper respiratory infection with the onset of fever, headache, vomiting, altered consciousness or other meningeal signs.

2. ***Meningococcal Septicemia:*** May present gradually after a prodrome of cough, headache and sore throat progressing to spiking fever with chills, arthralgias, myalgias and acute prostration. A petechial rash may be present at the axillae, wrists and ankles, and may progress to a purpuric rash. Shock is not uncommon, and may lead to death. Fulminant meningococcemia may present abruptly with a petechial rash that progresses rapidly to purpura fulminans, shock, and death – often within hours.

Laboratory Criteria for Diagnosis

Isolation of *Neisseria meningitidis* from a normally sterile site such as blood or cerebrospinal fluid (CSF), or less commonly, from joint, pleural, or pericardial fluid.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Note: *Nasopharyngeal recovery of* ***N****. meningitidis should not be reported.*

Required Comments

Include the serogroup (A, B, C, Y, Z, W135) and the patient's meningococcal vaccination history.

Additional Considerations

Document the patient's travel history (preceding 2 weeks) and any known exposures to other cases.

TOC

4.41 MUMPS

ICD-9: 072 ***Reference 2***

Clinical Description

An acute viral disease characterized by fever, swelling and tenderness of one or more salivary glands. It can be complicated by orchitis, oophoritis, aseptic meningitis, encephalitis (rarely), and pancreatitis (usually mild), and in rare instances can lead to permanent nerve deafness.

Clinical Case Definition

An illness with acute onset of unilateral or bilateral tender, self-limited swelling of the parotid or other salivary glands lasting ≥ 2 days, and without other apparent cause.

Laboratory Criteria for Diagnosis

Any of the following:

- Isolation of mumps virus from a clinical specimen.
- Significant rise between acute and convalescent titers in serum mumps IgG antibody level by any standard serologic assay.
- Positive serologic test for mumps IgM antibody.

Case Classification

Confirmed: A case that is laboratory-confirmed **OR** a case that meets the clinical case definition and is epidemiologically linked to a confirmed or probable case. A laboratory-confirmed case does not need to meet the clinical case definition.

Required Comments

Include the patient's MMR vaccination history.

Additional Considerations

Specify the patient's age in months if < 1 year, travel history (preceding 1 month), and any known exposures to mumps.

TOC

4.42 PERTUSSIS

ICD-9: 033 ***References 2 & 7***

Clinical Description

An acute bacterial disease that typically begins as a "cold" with gradually worsening cough. The cough becomes paroxysmal, frequently with a characteristic "whooping" sound heard on inspiration, and may be followed by vomiting. Untreated, the illness lasts 1-2 months and may be complicated by pneumonia or neurologic sequelae.

Clinical Case Definition

A cough illness lasting ≥ 2 weeks with one of the following: paroxysms of coughing, inspiratory "whoop", or post-tussive vomiting, without other apparent cause.

Laboratory Criteria for Diagnosis

Any of the following:

- Isolation of *Bordetella pertussis* from a clinical specimen.
- Positive polymerase chain reaction for *B. pertussis.*
- Presence of IgG or IgA directed toward pertussis toxin (PT) or filamentous hemagglutinin antigen (FHA).

Case Classification

Confirmed: A case that is laboratory-confirmed **OR** a case that that meets the clinical case definition and is either laboratory-confirmed or epidemiologically linked to a laboratory-confirmed case.

Required Comments

Include the patient's pertussis vaccination history.

Additional Considerations

Specify the patient's age in months if < 1 year and any pertussis contacts.

TOC

4.43 PLAGUE

ICD-9: 020 ***References 2 & 7***

EXCLUDES: Probable BW attack.

Clinical Description

Plague is transmitted to humans by fleas or by direct exposure to infected tissues or respiratory droplets. The disease is systemically characterized by fever, chills, headache, malaise, prostration, and leukocytosis, and has four major clinical forms:

1. ***Bubonic:*** Lymphadenitis in the lymph nodes that drain the region of the infected flea bite. Most often (> 90%) inguinal; alternatively cervical or axillary.
2. ***Pneumonic:*** May be primary or secondary. Primary pneumonic plague is acquired from person to person transmission by droplet spread. Secondary pneumonic plague arises as a complication of bubonic plague.
3. ***Septicemic:*** May be a complication of any of the other forms of plague, or may be the presenting syndrome.
4. ***Pharyngeal:*** Results from exposure to infectious droplets, usually from a patient with pneumonic plague.

Laboratory Criteria for Diagnosis

Either of the following:

- Cultural isolation of *Yersinia pestis* from buboes, blood, CSF or sputum.
- Passive hemagglutination test (PHA test) demonstrating fourfold change in antibody titer, specific for F1 antigen of *Y. pestis* (HI test) in paired sera.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the patient's travel history (preceding 2 weeks) including recent field exercises or outdoor activity where infected fleas might have been encountered, and the clinical form of the infection.

TOC

4.44 PNEUMOCOCCAL PNEUMONIA

ICD-9: 481 ***Reference 1***

INCLUDES: Service Member cases only.

Clinical Description

An acute bacterial infection typically characterized by sudden onset with shaking chills, fever, pleural pain, dyspnea, tachypnea, a cough that produces "rusty" sputum, and leukocytosis.

Laboratory Criteria for Diagnosis

Isolation of *S. pneumoniae* from sputum or pleural fluid, or from respiratory secretions obtained by percutaneous transtracheal aspirate.

Case Classification

Probable: A clinically compatible case that has a sputum gram stain with gram-positive diplococci and polymorphonuclear lymphocytes.

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Include the patient's pneumococcal vaccination history and antibiotic resistance pattern, if applicable.

TOC

4.45 POLIOMYELITIS

ICD-9: 045 ***Reference 2***

Clinical Description

A viral infection that typically starts as a minor illness with fever, malaise, headache, nausea and vomiting. If the disease progresses (approximately 1% of cases), severe muscle pain and stiffness of the neck and back appear, with or without flaccid paralysis. Maximum extent of paralysis typically occurs within 3-4 days, is usually asymmetric, and its onset is accompanied by fever. Any paralysis still present after 60 days is likely to be permanent.

Clinical Case Definition

Acute onset of flaccid paralysis of one or more limbs with decreased or absent tendon reflexes in the affected limbs, without other apparent cause, and without sensory or cognitive loss.

Laboratory Criteria for Diagnosis

Isolation of the virus from stool samples, CSF, or oropharyngeal secretions.

Case Classification

Confirmed: A case that meets the clinical and laboratory case definitions.

Note: *A case update should be provided 60 days after presentation and should document the persistence of any neurologic deficit.*

Required Comments

Include the patient's specific vaccination history (OPV or IPV).

Additional Considerations

Document the recent vaccination history of both the patient and close contacts, and recent (preceding 1 month) foreign travel.

TOC

4.46 Q FEVER

ICD-9: 083.0 ***Reference 1***

EXCLUDES: Probable BW attack.

Clinical Description

An acute febrile disease caused by the rickettsia *Coxiella burnetii*, marked by a sudden onset of chills, retrobulbar headache, weakness, malaise and severe sweats. Severity of the illness varies from inapparent to fatal, with most fatalities resulting from endocarditis. It may also present as a "fever of unknown origin".

Laboratory Criteria for Diagnosis

Any of the following:

- Demonstration of a rise in specific antibodies between acute and convalescent stages by IF, microagglutination, CF, or ELISA test. High titers of antibodies to phase I of the infective organism may indicate chronic infection, such as endocarditis.
- Recovery of the infectious agent from patients' blood is diagnostic.
- Identification of the infectious agent in tissues by IF and EM.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the source of infection, potential exposure to infected animals, and potential occupational exposure (e.g., veterinarian).

TOC

4.47 RABIES, HUMAN

ICD-9: 071 ***Reference 2***

Clinical Description

Rabies is an acute encephalomyelitis that almost always progresses to coma or death within 10 days after the first symptom.

Laboratory Criteria for Diagnosis

Any of the following:

- Detection by direct fluorescent antibody of viral antigens in a clinical specimen (preferably from the brain or the nerves surrounding hair follicles in the nape of the neck).
- Isolation (in cell culture or in a laboratory animal) of rabies virus from saliva, cerebrospinal fluid (CSF), or central ner-vous system tissue.
- Identification of a rabies-neutralizing antibody titer ≥ 5 (complete neutralization) in the serum or CSF of an unvac-cinated person.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Note: *Animal bites requiring prophylaxis should not be reported as rabies.*

Required Comments

None.

Additional Considerations

Document the patient's history of animal bites or presence at probable locations of exposure (e.g., bat cave), potential occu-pational exposure, (e.g., veterinarian, animal control officer), relevant immunization history, and type of rabies identified (implicated species).

TOC

4.48 RELAPSING FEVER

ICD-9: 087 ***Reference 1***

Clinical Description

An arthropod-borne spirochetal disease characterized by a fever lasting 2-9 days that alternates with afebrile periods of 2-4 days. The total number of relapses varies from a single incident to over ten. Louse-borne disease lasts 13-16 days and the tick-borne usually lasts longer. Transitory petechial rashes are common during the initial febrile period.

Laboratory Criteria for Diagnosis

Any of the following:

- Demonstration of *Borrelia recurrentis* in darkfield preparations of fresh blood or stained thick or thin films.
- Intraperitoneal inoculation of laboratory rats or mice with blood taken during the febrile period.
- Isolation of organism through blood culture.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the patient's travel history (preceding 1 month), with particular attention to the geographic locations of field exercises and outdoor activities. Also document exposure to lice or ticks.

TOC

4.49 RHEUMATIC FEVER (ACUTE)

ICD-9: 390 ***Reference 6***

Clinical Description

Rheumatic fever is a delayed sequel to pharyngeal infection with Group A beta hemolytic streptococci. The usual manifestations in the acute form are migratory polyarthritis, fever and carditis. Other typical manifestations are Sydenham's chorea, subcutaneous nodules and erythema marginatum.

Clinical Case Definition

Rheumatic fever is generally defined by the Jones criteria. These stipulate that the presence of either two major manifestations or one major and two minor manifestations, with evidence of a preceding streptococcal infection, is considered diagnostic of rheumatic fever.

- **Major manifestations:** Carditis, polyarthritis, chorea, erythe-ma marginatum, subcutaneous nodules.
- **Minor manifestations:** Fever, arthralgia, previous rheumatic disease, elevated ESR or CRP, prolonged P-R interval.

Laboratory Criteria for Diagnosis

Any of the following:

- Positive anti-streptolysin O test (ASO).
- Isolation of Group A streptococcus from a throat culture.
- Positive antihyaluronidase (AH), anti-DNAse B, anti-NADase or anti-streptokinase (ASK).

Case Classification

Confirmed: Confirmation is clinical, based upon the presence of the Jones criteria as defined above with a history of preceding scarlet fever or other streptococcal infection, untreated pharyngitis, or an increased ASO titer. Laboratory testing alone is insufficient to make a diagnosis.

Required Comments

None.

Additional Considerations

Document the patient’s training/travel history (preceding 2 months).

4.50 RIFT VALLEY FEVER

ICD-9: 066.3 ***Reference 1***

TOC

Clinical Description

A mosquito-borne viral disease characterized by fever, chills, headache, myalgia, and arthralgia. May include retinitis, encephalitis and hemorrhage. May have biphasic fever.

Laboratory Criteria for Diagnosis

Any of the following:

- Fourfold or greater rise in specific antibody titer.
- Plaque reduction neutralization assay.
- Viral isolation.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the patient's travel history to Africa (preceding 2 weeks).

4.51 ROCKY MOUNTAIN SPOTTED FEVER

ICD-9: 082.0 ***Reference 2***

Clinical Description

A tick-borne febrile illness characterized by an acute onset of myalgia, headache, and a petechial rash that is present on the palms and soles in two-thirds of cases.

Laboratory Criteria for Diagnosis

Any of the following:

- Fourfold or greater rise in antibody titer to *Rickettsia rickettsii* antigen by immunofluorescence antibody (IFA), complement fixation (CF), latex agglutination (LA), microagglutination (MA), or indirect hemagglutination antibody (IHA) test in acute and convalescent specimens ideally taken ≥ 3 weeks apart.
- Positive polymerase chain reaction to *R. rickettsii*.
- Demonstration of positive immunofluorescence of skin lesion (biopsy) or organ tissue (autopsy).
- Isolation of *R. rickettsii* from clinical specimen.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the patient's geographic location and likelihood of exposure to ticks in the preceding 2 weeks (e.g., during field exercises or other outdoor activities).

TOC

4.52 RUBELLA

ICD-9: 056 ***Reference 2***

Clinical Description

A mild febrile viral rash illness. Constitutional symptoms are frequently absent in children. Adults typically experience a 1-5 day prodrome of low-grade fever, malaise, headache, mild coryza and conjunctivitis. Rash is often absent in adults. Post-auricular, occipital and posterior cervical lymphadenopathy is characteristic, and precedes the rash by up to 10 days. Complications include arthritis, encephalitis and thrombocytopenia, and occur primarily in adults.

Congenital rubella syndrome occurs in up to 90% of infants born to pregnant women who acquire rubella during the first trimester of pregnancy.

Clinical Case Definition

All of the following:

- Acute onset of generalized maculopapular rash.
- Temperature > 99.0 F (> 37.2 C).
- Arthralgia/arthritis, lymphadenopathy, or conjunctivitis.

Laboratory Criteria for Diagnosis

Either of the following:

- Isolation of rubella virus.
- Fourfold rise between acute and convalescent titers in serum rubella IgG antibody level by any standard serologic assay.

Note: *False positive serum rubella IgM test results have been reported in persons with other viral infections (e.g., acute infection with Epstein-Barr virus [infectious mononucleosis], recent cytomegalovirus infection, parvovirus infection), or in the presence of rheumatoid factor.*

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed **OR** a case that meets the clinical case definition and is epidemiologically linked to a laboratory-confirmed case.

Required Comments

Include the patient's rubella vaccination history and whether the case is congenital rubella syndrome.

Additional Considerations

Specify the patient's age in months if < 1 year, whether patient is pregnant, and location/nature of exposure.

4.53 SALMONELLOSIS

ICD-9: 003 ***Reference 2***

EXCLUDES: Salmonella typhi and S. paratyphi.

Clinical Description

An illness of variable severity typically producing diarrhea, abdominal pain, nausea, and sometimes vomiting. Asymptomatic infections may occur, and the organism may cause extraintestinal infections.

Laboratory Criteria for Diagnosis

Isolation of *Salmonella* sp. from a clinical specimen.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the source of exposure.

TOC

4.54 SCHISTOSOMIASIS

ICD-9: 120 ***Reference 7***

Clinical Description

A trematode disease caused by *Schistosoma* sp. There are three primary varieties that cause disease in humans: *S. mansoni*, *S. haematobium* and *S. japonicum*. These organisms produce two clinical forms of the disease:

1. ***Urinary Schistosomiasis*** gives rise to dysuria, frequency, and hematuria at the end of urination, and is usually caused by *S. haematobium.*

2. ***Intestinal Schistosomiasis*** is normally accompanied by diarrhea, abdominal pain, and hepatosplenomegaly, and is caused by *S. mansoni* and *S. japonicum.*

Laboratory Criteria for Diagnosis

Demonstration of eggs in stool, urine, or biopsy specimens.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

Specify the form of schistosomiasis.

Additional Considerations

Document the patient's travel history (preceding 2 months) and exposure to fresh water (i.e., wading, swimming, etc.).

TOC

4.55 SHIGELLOSIS

ICD-9: 004 ***Reference 2***

Clinical Description

An illness of variable severity characterized by diarrhea, fever, nausea, cramps, and tenesmus. Stools typically contain blood and mucus, but may be watery. Asymptomatic infections may occur.

Laboratory Criteria for Diagnosis

Isolation of *Shigella* sp. from a clinical specimen.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the patient's travel history (preceding 1 week), source of infection (if known), and day care attendance/employment.

TOC

4.56 SMALLPOX

ICD-9: 050 ***Reference 6***

Clinical Description

Smallpox is a severe contagious viral rash illness that was eradicated in 1977. High fever, headache, myalgia, abdominal pain and vomiting, and occasionally a transient blotchy erythematous rash herald the onset. After 3-4 days, the patient defervesces and appears to improve. At this time, painful mouth lesions occur on the buccal mucosa, followed by macules on the face and forearms that progress to papules. The rash spreads from the distal extremities to the trunk, and includes the palms and soles. After 3-4 days, the papules become vesicular and then pustular. The rash typically leaves scarring after healing.

Laboratory Criteria for Diagnosis

PCR diagnosis can be performed by USAMRIID and CDC.

Case Classification

Diagnosis was historically clinical, with no laboratory test required for confirmation. Currently, any case thought to be smallpox is required to be confirmed by laboratory testing done at a reference lab.

Required Comments

Any verified case of smallpox should be considered evidence of biological warfare. Detailed history of possible exposures is required, and each case should also be reported as a BW agent exposure.

Additional Considerations

None.

TOC

4.57 STREPTOCOCCUS, GROUP A, INVASIVE

ICD-9: 038.0 ***Reference 2***

EXCLUDES: Group A Streptococcal Pharyngitis, Rheumatic Fever, Streptococcal Toxic Shock Syndrome.

Clinical Description

Invasive Group A streptococcal infections may manifest as any of various clinical syndromes, including pneumonia, bacteremia in association with cutaneous infection (e.g., cellulitis, erysipelas, or infection of a surgical or nonsurgical wound), deep soft-tissue infection (e.g., myositis or necrotizing fasciitis), meningitis, peritonitis, osteomyelitis, septic arthritis, postpartum sepsis (i.e., puerperal fever, endometritis), neonatal sepsis, and nonfocal bacteremia.

Laboratory Criteria for Diagnosis

Isolation of Group A streptococcus (*Streptococcus pyogenes*) by culture from a normally sterile site (e.g., blood or cerebrospinal fluid; or less commonly, from joint, pleural, or pericardial fluid).

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Specify the type of clinical presentation and note if nosocomial.

TOC

4.58 SYPHILIS

ICD-9: 090 (Syphilis, Congenital) ***Reference 3***
091 (Syphilis, Primary/ Secondary)
095 (Syphilis, Tertiary)
096 (Syphilis, Latent)

Clinical Description

A complex disease caused by the bacteria *Treponema pallidum* that has a highly variable clinical course. The stage of syphilis is determined by the clinical signs and generally by the time elapsed since primary infection. Syphilis can be divided into the following classifications:

1. ***Primary:*** A stage of infection characterized by one or more painless, usually genital, chancres.

2. ***Secondary:*** A stage characterized by rash and/or localized or diffuse mucocutaneous lesions, often with generalized lymphadenopathy. The primary chancre may still be present.

3. ***Latent (early or late):*** A stage in which organisms persist in the body of the infected person without causing symptoms or signs. Latent syphilis is subdivided into early, late, and unknown categories based on the duration of infection.

4. ***Tertiary:*** Latent syphilis of long duration, usually past one year, that subsequently becomes clinical. Clinical signs depend upon the degree and organ system affected, but may be cardiac, neurologic, ophthalmic, auditory and gummatous in nature.

5. ***Congenital:*** A condition caused by infection in utero. A wide spectrum of severity exists; only severe cases are clinically apparent at birth. An infant or child < 2 years may have signs such as hepatosplenomegaly, rash, condyloma lata, snuffles, jaundice, pseudoparalysis, anemia, or edema (from nephrotic syndrome and/or malnutrition). An older child may have syphilitic stigmata such as interstitial keratitis, nerve deafness, anterior bowing of shins, frontal bossing, mulberry molars, Hutch-inson teeth, saddle nose, rhagades, or Clutton joints.

Laboratory Criteria for Diagnosis

Either of the following:

- Demonstration of *T. pallidum* in clinical specimens by darkfield microscopy, direct fluorescent antibody (DFA-TP), or equivalent methods.
- A positive non-treponemal test (RPR or VDRL) AND a positive treponemal test (FTA-ABS or MHA-TP)

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Note: *Neurosyphilis should be reported by the stage of syphilis in which it presents (usually tertiary).*

Required Comments

None.

Additional Considerations

None. Note if neurosyphilis is present.

TOC

4.59 TETANUS

ICD-9: 037 ***Reference 2***

Clinical Description

Acute onset of hypertonia and/or painful muscular contractions (usually of the muscles of the jaw and neck) and generalized muscle spasms without other apparent medical cause.

Laboratory Criteria for Diagnosis

Not applicable. Diagnosis is made clinically from history and clinical signs. There is no detectable antibody response and the organism is rarely recovered from the site of infection.

Case Classification

Confirmed: A clinically compatible case reported by a health care professional.

Required Comments

Include the patient's tetanus vaccination history.

Additional Considerations

Include the patient's age in months if <1 year.

4.60 TOXIC SHOCK SYNDROME

ICD-9: 785.59 ***Reference 2***

INCLUDES: Cases caused by both ***Staphylococcus aureus*** *and* ***Strep-tococcus pyogenes****.*

Clinical Description

1. ***Staphylococcal Toxic Shock Syndrome (TSS):*** A severe illness characterized by high fever, vomiting, profuse watery diarrhea and myalgia, followed by hypotension and shock. Often accompanied by a "sunburn-like" rash. Frequently, desquamation of the palms and soles occurs 1-2 weeks after the onset. The causative agent is *S. aureus*, although the organism is frequently not recovered.

2. ***Streptococcal Toxic Shock Syndrome (STSS):*** A severe illness with signs and symptoms as above for TSS. Associated with invasive or noninvasive Group A streptococcal (*Streptococcus pyogenes*) infection. STSS may occur with infection at any site but most often occurs in association with infection of a cutaneous lesion. Signs of toxicity and a rapidly progressive clinical course are characteristic, and the case-fatality rate may exceed 50%.

Clinical Case Definition

1. ***Staphylococcal Toxic Shock Syndrome:*** An illness with all of the following clinical manifestations…
   - **Fever:** Temperature ≥ 102.0 F (≥ 38.9 C).
   - **Rash:** Diffuse macular erythroderma.
   - **Desquamation:** 1-2 weeks after onset of illness, particularly on the palms and soles.
   - **Hypotension:** Systolic blood pressure ≤ 90 mm Hg for adults or < fifth percentile by age for children aged < 16 years; orthostatic drop in diastolic blood pressure ≥ 15 mm Hg from lying to sitting, orthostatic syncope, or orthostatic dizziness.

   …and three or more of the following:
   - **Gastrointestinal:** Vomiting or diarrhea at onset of illness.
   - **Muscular:** Severe myalgia or creatinine phosphokinase level at least twice the upper limit of normal.
   - **Mucous Membrane:** Vaginal, oropharyngeal, or conjunctival hyperemia.
   - **Renal:** Blood urea nitrogen or creatinine at least twice the upper limit of normal for laboratory or urinary sediment with pyuria (≥ 5 leukocytes per high-power field) in the absence of urinary tract infection.
   - **Hepatic:** Total bilirubin, ALT, or AST levels at least twice the upper limit of normal for laboratory.
   - **Hematologic:** Platelets < 100,000/mm^3.
   - **Central Nervous System:** Disorientation or alterations in consciousness without focal neurologic signs when fever and hypotension are absent.

2. ***Streptococcal Toxic Shock Syndrome (STSS):*** An illness with the following clinical manifestations occurring within the first 48 hours of hospitalization or, for a nosocomial case, within the first 48 hours of illness:
   - **Hypotension**: Defined by a systolic blood pressure ≤ 90 mm Hg for adults or < the fifth percentile by age for children aged < 16 years.
   - **Multi-organ Involvement:** Characterized by two or more of the following:
     - **Renal Impairment:** Creatinine ≥ 2 mg/dL (≥ 177 μmol/L) for adults or ≥ twice the upper limit of normal for age. In patients with preexisting renal disease, a > twofold elevation over the baseline level.
     - **Coagulopathy:** Platelets ≤ 100,000/mm^3 (≤ 100 x 106 /L) or disseminated intravascular coagulation, defined by prolonged clotting times, low fibrinogen level, and the presence of fibrin degradation products.
     - **Liver Involvement:** ALT, AST, or total bilirubin levels ≥ twice the upper limit of normal for the patient's age. In patients with preexisting liver disease, a > twofold increase over the baseline level.

- **Acute Respiratory Distress Syndrome:** Defined by acute onset of diffuse pulmonary infiltrates and hypoxemia in the absence of cardiac failure, **OR** by evidence of diffuse capillary leak manifested by acute onset of generalized edema, or pleural or peritoneal effusions with hypoalbuminemia.
- **Erythematous Macular Rash:** A generalized rash that may desquamate.
- **Soft-tissue Necrosis:** Includes necrotizing fasciitis or myositis, or gangrene.

Laboratory Criteria for Diagnosis

For Streptococcal Toxic-Shock Syndrome Only: Isolation of Group A streptococcus from a normally sterile site.

Case Classification

1. ***Confirmed Staphylococcal TSS:*** Confirmation is clinical, and is defined as a case in which the required clinical findings described above are present (including desquamation, unless the patient dies before desquamation occurs), in the absence of Group A Streptococcus.
2. ***Confirmed STSS:*** A case that meets the clinical case definition and with isolation of Group A streptococcus from a normally sterile site (e.g., blood or cerebrospinal fluid; or less commonly, from joint, pleural, or pericardial fluid).

Required Comments

Specify the form of toxic shock syndrome (staphylococcal or streptococcal).

Additional Considerations

None.

TOC

4.61 TRICHINOSIS

ICD-9: 124 ***Reference 2***

Clinical Description

A disease caused by ingestion of *Trichinella* sp. larvae. The disease has variable clinical manifestations. Common signs and symptoms include eosinophilia, fever, myalgia, and periorbital edema.

Laboratory Criteria for Diagnosis

Either of the following:

- Demonstration of *Trichinella* larvae in tissue obtained by muscle biopsy.
- Positive serologic test for *Trichinella*.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document ingestion of probable sources of infection (e.g., poorly cooked meat).

4.62 TRYPANOSOMIASIS

ICD-9: 086 ***Reference 7***

Clinical Description

An arthropod-borne protozoal disease with two distinct forms:

1. ***African Trypanosomiasis:*** In the early stages, a painful chancre that originates as a papule and evolves into a nodule may be found at the primary tsetse fly bite site. There may be fever, intense headache, insomnia, painless lymphadenopathy, anemia, local edema and rash. In the later stages, there is cachexia, somnolence and CNS signs. The disease may run a protracted course of several years in the case of *Trypanosoma brucei gambiense* (B56-0). In cases of *T. b. rhodesiense* (B56-1), the disease has a rapid and acute evolution. Both diseases are always fatal without treatment.

2. ***American Trypanosomiasis (Chagas disease):*** The main clinical signs are fever, malaise, hepatosplenomegaly and lymphadenopathy in the acute phase. Many patients present without clinical signs. An inflammatory response at the site of infection (chagoma) may last up to 8 weeks. Chronic infection can lead to myocarditis and meningoencephalitis.

Laboratory Criteria for Diagnosis

1. ***African Trypanosomiasis:***
   - Serological: Card agglutination trypanosomiasis test (CATT) for *T. b. gambiense* only or immunofluorescent assay (IFA) for *T. b. rhodesiense* mainly and possibly for *T. b. gambiense*.
   - Parasitological: Detection (by microscopy) of trypanosomes in blood, lymph nodes, aspirates or CSF.

2. ***American Trypanosomiasis:***
   Either of the following:
   - Positive parasitology (direct, xenodiagnosis, blood culture).
   - Positive serology for *T. cruzi* antibodies (IgM) by indirect hemagglutination test (IHA), indirect immunoflourescent antibody test (IFAT), direct agglutination test (DA) or ELISA.

Case Classification

1. ***Probable African Trypanosomiasis:*** A case with positive serology, with or without clinical symptoms.

   Confirmed African Trypanosomiasis: A case with positive parasitology, with or without clinical symptoms.

2. ***Confirmed American Trypanosomiasis:*** A clinically compatible case that is laboratory-confirmed.

Required Comments

Specify the form of trypanosomiasis.

Additional Considerations

Document the patient's travel history to endemic areas.

4.63 TUBERCULOSIS, PULMONARY

ICD-9: 011 ***Reference 4***

Clinical Description

A chronic bacterial infection caused by *Mycobacterium tuberculosis*, characterized pathologically by the formation of granulomas. The most common site of infection is the lung, but other organs may be involved. Specific symptoms of pulmonary tuberculosis include cough, chest pain and hemoptysis. Systemic symptoms also include fever, chills, night sweats, fatigue and weight loss.

Clinical Case Definition

All of the following:

- A positive tuberculin skin test (unless immunocompromised).
- Other signs and symptoms compatible with tuberculosis (e.g., an abnormal and unstable [worsening or improving] chest
  radiograph, or clinical evidence of current disease).
- Completed diagnostic evaluation, including: history, physical exam, smear and culture, Mantoux skin test and CXR.

Laboratory Criteria for Diagnosis

Either of the following:

- Isolation of *M. tuberculosis* from a clinical specimen.
- Demonstration of *M. tuberculosis* from a clinical specimen by nucleic acid amplification test.

Case Classification

Probable: Clinical signs and symptoms of pulmonary tuberculosis with demonstration of acid-fast bacilli in a clinical specimen when a culture has not been or cannot be obtained.

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the patient's history of exposure to a known or suspected case, travel to or origin from highly endemic countries, potential occupational exposure (e.g., health care worker), and evidence of multi-drug resistance.

TOC

4.64 TULAREMIA

ICD-9: 021 ***Reference 1***

EXCLUDES: Probable BW attack.

Clinical Description

A zoonotic bacterial disease with a variety of clinical manifestations related to the route of introduction and the virulence of the disease agent:

- **Percutaneous Exposure:** From the bite of an arthropod. Normally presents as an indolent ulcer at the site of introduction along with swelling of the regional lymph nodes.
- **Ingestion:** Normally produces a painful pharyngitis, abdominal pain, diarrhea and vomiting.
- **Inhalation:** May be followed by pneumonic involvement or a primary septicemia. Blood-borne organisms may localize in the lung and pleural spaces.

Laboratory Criteria for Diagnosis

Any of the following:

- Diagnosis can be made by a four-fold rise in specific serum antibodies.
- Isolation of *Francisella tularensis* in a clinical specimen.
- FA examination of ulcerative exudates, lymph node aspirates, or other clinical specimen.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

None.

Additional Considerations

Document the clinical manifestation and the patient's history of possible exposure (hunting, known arthropod bites, etc.).

TOC

4.65 TYPHOID FEVER

ICD-9: 002 ***Reference 2***

EXCLUDES: S. paratyphi

Clinical Description

An illness caused by *Salmonella typhi* characterized by insidious onset of sustained fever, headache, malaise, anorexia, relative bradycardia, constipation or diarrhea, and nonproductive cough. However, many mild and atypical infections occur. Carriage of *S. typhi* may be prolonged.

Laboratory Criteria for Diagnosis

Isolation of *S. typhi* from blood, stool, or other clinical specimen.

Note: *Serologic evidence alone is insufficient for diagnosis.*

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Note: *Asymptomatic carriage of S. typhi should not be reported as typhoid fever.*

Required Comments

Include the patient's typhoid vaccination history.

Additional Considerations

Document the patient's travel history (preceding 3 months), source of infection, and potential occupational exposure.

4.66 TYPHUS FEVER

ICD-9: 080 ***Reference 1***

Clinical Description

A group of arthropod-borne rickettsial diseases with four clinically distinct presentations, each with its own specific infectious agent and vector:

1. ***Epidemic (Louse-borne) Typhus:*** (*Rickettsia prowazekii.)* Characterized by headache, chills, prostration, fever and general pain. A macular eruption appears on the fifth to sixth day, initially on the upper trunk followed by spread to the entire body, but usually sparing the face, palm, and soles. The infectious agent is transmitted by body lice.

2. ***Murine Typhus Fever:*** (*R. typhi.)* Similar to louse-borne typhus, but often milder. The infectious agent is transmitted by fleas.

3. ***Scrub Typhus:*** (*R. tsutsugamushi*) Often produces a primary "punched out" skin ulcer (eschar) corresponding to the primary attachment of an infected mite. The acute onset of symptoms follows within several days, characterized by fever, headache, profuse sweating, conjunctival injection and lymphadenopathy. A dull red maculopapular eruption appears on the trunk late in the first week, gradually extending to the extremities.

4. ***Tick-borne Typhus:*** (*R. conorii, sibirica* and *australis.*) Tick-borne typhus has a clinical presentation similar to that seen in scrub typhus, frequently with an ulcer at the site of the tick bite.

Laboratory Criteria for Diagnosis

- The IF test is most commonly used for laboratory confirmation of louse-borne typhus, murine typhus and tick-borne typhus. The test may not discriminate between louse and murine typhus unless the sera are differentially absorbed with the respective rickettsial antigen prior to testing. Other diagnostic methods are EIA, CF (with group-specific or washed type-specific rickettsial antigens) and the toxin-neutralization test. Antibody tests usually become positive in the second week.
- Isolation of *R. tsutsugamushi* by inoculation of patient blood in white mice.
- Serologic detection of specific IgM at 1:32 dilution or higher by immunoperoxidase (IP), or at 1:10 or higher by indirect immunofluorescence (IF).

Case Classification

A clinically compatible case that is laboratory-confirmed.

Required Comments

Specify the form of typhus.

Additional Considerations

Document the patient's history of foreign travel (preceding 3 weeks) and history of arthropod exposure.

TOC

4.67 URETHRITIS, NON-GONOCOCCAL (NGU)

ICD-9: 099.40 ***Reference 3***

Clinical Description

A sexually transmitted genital infection, manifested in males primarily as a urethritis and in females as a mucopurulent cervicitis.

Laboratory Criteria for Diagnosis

Any of the following…

- Gram stain of urethral secretions demonstrating ≥ 5 WBCs per oil immersion field
- Positive leukocyte esterase test on first-void urine
- ≥ 10 WBCs per high power field on a first void urine

…and absence of laboratory evidence of other causes of urethritis such as *Chlamydia trachomatis* or *Neisseria gonorrhoeae*.

Case Classification

Urethritis in the absence of demonstrated infection with other known common causes of sexually transmitted urethritis.

Required Comments

None.

Additional Considerations

None.

TOC

4.68 VACCINE ADVERSE EVENT

ICD-9: 979.9

Clinical Description

An adverse health event subsequent to a vaccination.

Laboratory Criteria for Diagnosis

None.

Case Classification

Any adverse event, subsequent to a vaccination and diagnosed as such by a health care provider, that results in an admission to a health care facility or results in loss from duty for one or more days.

Required Comments

Include the lot number and components of the vaccine administered and a description of the event.

Additional Considerations

None.

TOC

4.69 VARICELLA

ICD-9: 052 ***Reference 2***

INCLUDES: Service Member cases only.

Clinical Description

An illness with acute onset of mild constitutional symptoms, slight fever and generalized papulovesicular rash.

Clinical Case Definition

An illness with acute onset of diffuse (generalized) papulovesicular rash without other apparent cause.

Laboratory Criteria for Diagnosis

Either of the following:

- Isolation of varicella virus from a clinical specimen.
- Significant rise in serum varicella IgG antibody level by any standard serologic assay.

Case Classification

Confirmed: A clinically compatible case with laboratory confirmation **OR** a case that meets the clinical case definition and is epidemiologically linked to a confirmed or probable case.

Note: *Laboratory confirmation is not required if two or more epidmio-logically linked cases exist.*

Required Comments

Include the patient's varicella vaccination history.

Additional Considerations

Document the patient's exposure history.

TOC

4.70 YELLOW FEVER

ICD-9: 060 ***References 2 & 7***

Clinical Description

A mosquito-borne viral illness characterized by acute onset and constitutional symptoms followed by a brief remission, then a recurrence of fever with hepatitis and albuminuria. Renal failure, shock, and generalized hemorrhaging are possible.

Laboratory Criteria for Diagnosis

- Fourfold or greater rise in yellow fever serum IgG levels in a patient who has no history of recent yellow fever vaccination and with cross-reactions to other flaviviruses excluded.
- Presence of yellow fever-specific IgM.
- Demonstration of yellow fever virus, antigen, or genome in tissue, blood, or other body fluid.

Case Classification

Confirmed: A clinically compatible case that is laboratory-confirmed.

Required Comments

Include the patient's yellow fever vaccination history.

Additional Considerations

Document the patient's travel history (preceding 2 weeks).

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5.0 TRI-SERVICE REQUIRED DATA ELEMENTS

To assure consistency of the Tri-Service data, this section lists the minimum required data elements for each report, along with recommended reporting guidelines for each element. Each service may add its own additional data fields for internal analysis without compromising eventual data integration.

5.1 DEMOGRAPHIC DATA

1. **Case Number**
   Unique case identifier.

2. **Patient's First and Last Name**

3. **FMP/SSN**
   Family member prefix code and sponsor social security number.

4. **Patient Beneficiary Category**
   From beneficiary category list (e.g., A11, N15).

5. **Race/Ethnicity**
   White, black, Hispanic, Asian, American Indian, other.

6. **Patient's Sex/Gender**

7. **Date of Birth**
   Four-digit year, month, day.

5.2 MEDICAL DATA

1. **Diagnosis**
   ICD-9 based diagnosis code.

2. **Date of Onset**
   If unsure of date of onset, date of presentation is an adequate substitute.

3. **Confirmation**
   Yes, no or pending. Do not delay transmitting a report pending laboratory confirmation. Unconfirmed cases are not included for analysis or further reporting; reports must therefore be updated when confirmation becomes available.

4. **Method of Confirmation**
   Biopsy, slide, serology, culture, clinical, other.

5. **Travel History**
   Specify country where disease was probably acquired, when applicable. See individual case definitions to determine the time period for which reporting of travel destinations is required, generally 1-2 incubation periods.

5.3 COMMENTS

Text comments. Content will vary by condition; see case definitions for minimum suggested content.

Comments are important for data interpretation and should be provided whenever possible.

6.0 REPORTABLE DISEASE SYNONYMS

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Disease/ Condition:	Report As:	ICD-9 Code:
Bacillary Dysentery	Shigellosis	004
Bilharziasis	Schistosomiasis	120
Boutonneuse Fever	Typhus Fever	080
Breakbone Fever	Dengue	061
Catarrhal Jaundice	Hepatitis A	070.1
Cerebrospinal Fever	Meningococcal Disease	036
Chaga's Disease	Trypanosomiasis	086
Chickenpox	Varicella (active duty only)	052
Chilblain	CWI, Immersion Type	991.4
Congenital Rubella Syndrome	Rubella	056
Crimean Congo Fever	Hemorrhagic fever	065
Deer Fly Fever	Tularemia	021
Dengue Hemorrhagic Fever	Dengue	061
Desert Fever/ Rheumatism	Coccidioidomycosis	114
Ebola-Marburg Disease	Hemorrhagic Fever	065
Enteric Fever	Typhoid Fever	002
Epidemic Hepatitis/Jaundice	Hepatitis A	070.1
German Measles	Rubella	056
Guanarito Virus	Hemorrhagic Fever	065
Hansen Disease	Leprosy	030
Hard Measles	Measles	055
Heat Exhaustion	Heat Injury	992.3

Disease/ Condition:	Report As:	ICD-9 Code:
Hemophilis Meningitis	H. Influenza, Invasive	038.41
Hemorrhagic Fever with Renal Syndrome	Hantavirus	079.81
Hemorrhagic Jaundice	Leptospirosis	100
Hydrophobia	Rabies	071
Immersion Foot	CWI, Immersion Type	991.4
Infant Botulism	Botulism	005.1
Infantile Paralysis	Poliomyelitis	045
Infectious Hepatitis	Hepatitis A	070.1
Infectious Parotitis	Mumps	072
Japanese B Encephalitis (JE)	Encephalitis	062
Junin Virus	Hemorrhagic Fever	065
Kala-azar	Leishmaniasis, Visceral	085.0
Korean Hemorrhagic Fever	Hantavirus	079.81
Kyasanur Forest Disease	Hemorrhagic Fever	065
Lassa Fever	Hemorrhagic Fever	065
Legionnaires Disease	Legionellosis	482.8
Loa Loa	Filariasis	125
Lockjaw	Tetanus	037
Lues	Syphilis	091
Lyssa	Rabies	071
Machupo Virus	Hemorrhagic Fever	065
Malta Fever	Brucellosis	023
Mediterranean Fever	Brucellosis	023

Disease/ Condition:	Report As:	ICD-9 Code:
Meningococcal Meningitis	Meningococcal Disease	036.0
Morbilla	Measles	055
Mud fever	Leptospirosis	100
Omsk Hemorrhagic Fever	Hemorrhagic Fever	065
Onchocerciasis	Filariasis	125
Parenterally Transmitted Non-A Non-B Hepatitis	Hepatitis C	070.51
Pestis	Plague	020
Pontiac Fever	Legionellosis	482.8
Post Transfusion Non-A Non-B Hepatitis	Hepatitis C	070.51
Query Fever	Q Fever	083.0
Rabbit Fever	Tularemia	021
Red Measles	Measles	055
Rubeola	Measles	055
Sabia Virus	Hemorrhagic Fever	065
San Joaquin Valley Fever	Coccidioidomycosis	114
Sao Paolo Fever	Rocky Mountain Spotted Fever	082.0
Senetsu Fever	Ehrlichiosis	083.8
Serum Hepatitis	Hepatitis B	070.3
Sleeping Sickness	Trypanosomiasis	086
South African Tick Typhus	Typhus Fever	080
Streptococcal Toxic Shock Syndrome	Toxic Shock Syndrome	785.59

Disease/ Condition:	Report As:	ICD-9 Code:
Tick-borne Encephalitis (TBE)	Encephalitis	062
Trench Foot	CWI, Immersion Type	991.4
Trichinellosis	Trichinosis	124
Trichiniasis	Trichinosis	124
Tsutsugamushi	Typhus Fever	080
Typhus Abdominalis	Typhoid Fever	002
Typhus Exanthematicus	Typhus Fever	080
Undulant Fever	Brucellosis	023
Valley Fever	Coccidioidomycosis	114
Vibrionic Enteritis	Campylobacter	008.43
Weil Disease	Leptospirosis	100
Whooping Cough	Pertussis	033

7.0 References

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